

CLAIMS

1. (Currently Amended) A ~~digital device~~ task management device provided with an operating system for executing in parallel a plurality of tasks, each task comprising functions and managed as one execution unit by program execution means, comprising:

task attribute information storage means ~~for storing an attribute of an function which constitutes said task;~~

the program execution means for transmitting information on an attribute of a current-executing function ~~under execution~~ indicating that the current-executing function is a system library function having been provided by the operating system or other functions, and for querying whether or not to execute an abortion of ~~about an execution of an abort to a~~ the task to which ~~said~~ the current-executing function belongs;

task execution determination means, in response to the query from the program execution means, for determining not to abort the current-executing function when the attribute of the current-executing function is the system library function, or for determining to abort the current-executing task when the attribute of the current-executing function is the other function ~~whether or not the abort is executed based at least on the attribute of the function under execution responsive to the query from said program execution means on the execution of the abort; and~~

task attribute recognition means for storing the attribute of the current-executing function ~~currently under execution~~ in said the task attribute information storage means, based on the information on the attribute of the current-executing function transmitted from ~~said~~ the program execution means, and for returning the attribute of the current-executing function stored in ~~said~~ the task attribute information storage means, in response to a the query ~~from said task execution~~

~~determination means~~ about the attribute of the current-executing function ~~currently under execution~~ from the task execution determination means.

2. (Currently Amended) The ~~digital device~~ task management device according to claim 1, wherein

said information on the attribute of the current-executing function is a name of the function ~~under execution~~, and

said task attribute recognition means determines the attribute of the current-executing function ~~under execution~~ based on the name.

3. (Currently Amended) The ~~digital device~~ task management device according to claim 1, wherein said task managed as one execution unit is a process.

4. (Currently Amended) The ~~digital device~~ task management device according to claim 1, wherein said task managed as one execution unit is a thread.

5. (Currently Amended) A task management method for use in an operating system for executing in parallel a plurality of tasks, each task constituted of functions and managed as one execution unit ~~each managed as one execution unit~~, comprising the steps of:

storing an attribute of a current-executing function ~~currently under execution~~, said ~~function forming of said task~~ indicating that the current-executing function is a system library function having been provided the operation system or other functions; and

at executing an abortion of the task to which the current-executing function belongs,
determining not to abort the current-executing function when the attribute of the current-
executing function is the system library function, or determining to execute the abortion of the
current-executing function when the current-executing function is the other function, ~~upon~~
~~abortion of said task to which said function currently under execution belongs, whether or not~~
~~said function currently under execution can be aborted, based on said stored attribute of said~~
~~function.~~

Claims 6 through 8 (Cancelled).

9. (Currently Amended) A program product storing a computer program, when
executed, causing for causing a the computer which executes in parallel a plurality of tasks, each
task constituted of functions and managed as one execution unit, using a program execution
function to implement, to perform the steps of:

storing an attribute of a current-executing function indicating that the current-executing
function is a system library function having been provided the operation system or other
functions; and

at executing an abortion of the task to which the current-executing function belongs,
determining not to abort the current-executing function when the attribute of the current-
executing function is the system library function having been provided by the operating system,
or determining to execute the abortion of the current-executing function when the current-
executing function is the other function.

~~said program execution function for transmitting information on an attribute of a function currently under execution to a task attribute recognition function, and for querying a task execution determination function about execution of an abort to a task to which said function belongs;~~

~~a task execution determination function for determining whether or not said abort is executed based at least on the attribute of the function currently under execution responsive to the query about the execution of the abort;~~

~~a task attribute recognition function for storing the attribute of said function currently under execution in storage means based on the information on the attribute of said function transmitted from said program execution function, and for returning the attribute of said function stored in said storage means in response to a query about the attribute of said function currently under execution from said task execution determination function.~~

10. (Currently Amended) A computer readable recording medium having recorded thereon a program for causing a computer which executes in parallel a plurality of tasks, each task constituted of functions and managed as one execution unit, using a program execution function to implement, to perform the steps of:

storing an attribute of a current-executing function indicating that the current-executing function is a system library function having been provided the operation system or other functions; and

at executing an abortion of the task to which the current-executing function belongs, determining not to abort the current-executing function when the attribute of the current-executing function is the system library function having been provided by the operating system,

or determining to execute the abortion of the current-executing function when the current-executing function is the other function.

~~said program execution function for transmitting information on an attribute of a function currently under execution to a task attribute recognition function, and for querying a task execution determination function about execution of an abort to a task to which said function belongs;~~

~~a task execution determination function for determining whether or not said abort is executed based at least on the attribute of the function currently under execution responsive to the query about the execution of the abort;~~

~~a task attribute recognition function for storing the attribute of said function currently under execution in storage means based on the information on the attribute of said function transmitted from said program execution function, and for returning the attribute of said function stored in said storage means in response to a query about the attribute of said function currently under execution from said task execution determination function.~~

Claims 11 through 14 (Cancelled).

15. (New) The task management device according to claim 1, wherein, when processing goes back to a function calling the current-executing function, the task execution determination means determines whether or not the calling function is the system library function, or the other function.